

IN THE CLAIMS:

1-12. **(Cancel)**

13. **(New)** A method for continuous measuring of dynamic fluid consumption, with the use of a continuously-operating flow sensor with variable pressure drop, whereby fluid pressure beyond the flow sensor is adjusted to a constant value by means of a pressure regulator, comprising guiding fluid into the pressure regulator upon exceeding a discretionary pressure level.

14. **(New)** A method according to claim 13, comprising conducting a volume of fluid into the pressure regulator, said volume corresponding to the volume causing an increase in pressure.

15. **(New)** A method according to claim 13, comprising diverting an additional volume of fluid, created by pressure increase, after exceeding the maximum volume that can be moved into the pressure regulator.

16. **(New)** A pressure regulator (9) having a housing (41, 42), which contains an element (40) biased by a changeable force whereby said element (40) is coupled to a valve arrangement (49, 50) that is also arranged in the housing (41, 42) for the fluid to build up pressure therein, wherein the pressure regulator (9) contains a catch volume for the fluid.

17. **(New)** A pressure regulator according to claim 16, wherein the element (40) is a flexible diaphragm.

18. **(New)** A pressure regulator according to claim 16, wherein the catch volume is biased by an elastic element.

19. **(New)** A pressure regulator according to claim 18, wherein said elastic element is a compression spring.

20. **(New)** A pressure regulator according to claim 16, whereby the catch volume is biased by compressed air with an adjustable pressure.

21. **(New)** A pressure regulator according to claim 16, including a safety valve (54) downstream from the valve arrangement (49, 50) of the pressure regulator (9).

22. **(New)** A pressure regulator according to claim 21, wherein the safety valve (54) includes a valve element (55) which is biased in a closing direction with compressed air having a pressure equal to the pressure of the compressed air biasing the catch volume.

23. **(New)** A pressure regulator according to claim 22, wherein a supply line for compressed air for biasing the safety valve (54) in the closing direction can be closed by means of a sealing element (43, 44) connected to the diaphragm (40).

24. **(New)** A pressure regulator according to claim 16, for the continuous measuring of dynamic fuel consumption.

25. **(New)** A device for continuous measuring of dynamic fluid consumption, comprising a tank (2), a continuously-operating flow sensor for the fluid, and a pressure regulator (9) for the pressure of the fluid

between the flow sensor (7) and a fluid consumer, wherein the pressure regulator (9) comprises a housing containing a catch volume for the fluid, a valve arrangement, and an element biased by a changeable force and coupled to said valve arrangement.

26. **(New)** A device according to claim 25, comprising a conditioning system for the fluid.

27. **(New)** A device according to claim 25, comprising a controllable pump (6) for the fluid.

28. **(New)** A device according to claim 25, wherein the flow sensor (7) is a Coriolis sensor.

29. **(New)** A device according to claim 25, for the continuous measuring of dynamic fuel consumption.